

FIG. 5 is a block diagram of an error detector and corrector according to the invention used in the main memory interface of FIG. 4;

FIG. 5A is a block diagram of an XOR arrangement used in the error detector and corrector of FIG. 5;

FIG. 6 is a block diagram of an interrupt request controller used in the microprocessor interface of FIG. 3;

FIG. 7 is a block diagram of an interrupt inverter register used in the interrupt controller of FIG. 6;

FIG. 8 is a block diagram of an interrupt type register used in the interrupt request controller of FIG. 6; and

FIG. 9 is a diagram of a fault detector adapted to detect hard faults on a bi-directional data line according to the invention.

Description of the Preferred Embodiments

DATA STORAGE SYSTEM

Referring now to FIG. 1, a data storage system 10 is shown wherein a host computer 12 is coupled to a bank 14 of disk drives through a system interface 16. The system interface 16 includes a cache memory 18. A plurality of directors 20₀-20₁₅ is provided for controlling data transfer between the host computer 12 and the bank 14 of disk drives as such data passes through the cache memory 18. A pair of high address busses TH, BH is electrically connected to the high address memory section 18H of cache memory 18 as described in U. S. Patent application Serial No. 09/223,115 entitled "Data Storage System", inventors D. Castel et al., filed December 30, 1998, assigned to the same assignee as the present invention, the entire subject matter thereof being incorporated into this application by reference. A pair of low address busses TL, BL is electrically connected to the low address memory section 18L of cache memory 18.

DT
2/18/05

now U.S. Patent
No. 6,289,401